

SEQUENCE LISTING

<110> University of Rochester

Giger, Roman J.

<120> IDENTIFICATION OF NOVEL NOGO-RECEPTORS
AND METHODS RELATED THERETO

<130> 21108.0028P1

<140> Unassigned

<141> 2004-04-02

<150> 60/460,849

<151> 2003-04-04

<160> 29

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 473

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 1.

Met	Lys	Arg	Ala	Ser	Ser	Gly	Gly	Ser	Arg	Leu	Leu	Ala	Trp	Val	Leu	1	5	10	15
Trp	Leu	Gln	Ala	Trp	Arg	Val	Ala	Thr	Pro	Cys	Pro	Gly	Ala	Cys	Val	20	25	30	
Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Ser	Cys	Pro	Gln	Gln	Gly	Leu		35	40	45	
Gln	Ala	Val	Pro	Thr	Gly	Ile	Pro	Ala	Ser	Ser	Gln	Arg	Ile	Phe	Leu	50	55	60	
His	Gly	Asn	Arg	Ile	Ser	Tyr	Val	Pro	Ala	Ala	Ser	Phe	Gln	Ser	Cys	65	70	75	80
Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	Asn	Ala	Leu	Ala	Gly	Ile	85	90	95	
Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu	100	105	110	
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly	115	120	125	
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu	130	135	140	
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr	145	150	155	160
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp	165	170	175	
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser	180	185	190	
Val	Pro	Glu	His	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu	195	200	205	

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Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
 210                               215                220
Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
225                               230                235                240
Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
                               245                250                255
Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
                               260                265                270
Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
                               275                280                285
Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser
                               290                295                300
Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Phe Gln
305                               310                315                320
Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys Cys
                               325                330                335
Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg Pro
                               340                345                350
Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr
                               355                360                365
Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe
                               370                375                380
Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro
385                               390                395                400
Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg
                               405                410                415
Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly
                               420                425                430
Gln Ala Gly Ser Gly Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly
                               435                440                445
Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu
                               450                455                460
Val Leu Trp Thr Val Leu Gly Pro Cys
465                               470

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<210> 2

<211> 286

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 2

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Pro Val Thr Pro Ser Cys Pro Met Leu Cys Thr Cys Tyr Ser Ser Pro
 1                               5                10                15
Pro Thr Val Ser Cys Gln Ala Asn Asn Phe Ser Ser Val Pro Leu Ser
                               20                25                30
Leu Pro Pro Ser Thr Gln Arg Leu Phe Leu Gln Asn Asn Leu Ile Arg
                               35                40                45
Ser Leu Arg Pro Gly Thr Phe Gly Pro Asn Leu Leu Thr Leu Trp Leu
                               50                55                60
Phe Ser Asn Asn Leu Ser Thr Ile Tyr Pro Gly Thr Phe Arg His Leu
65                               70                75                80
Gln Ala Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg His Leu Arg Ser
                               85                90                95
Leu Glu Pro Asp Thr Phe Gln Gly Leu Glu Arg Leu Gln Ser Leu His
                               100                105                110

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Leu Tyr Arg Cys Gln Leu Ser Ser Leu Pro Gly Asn Ile Phe Arg Gly
   115           120           125
Leu Val Ser Leu Gln Tyr Leu Tyr Leu Gln Glu Asn Ser Leu Leu His
   130           135           140
Leu Gln Asp Asp Leu Phe Ala Asp Leu Ala Asn Leu Ser His Leu Phe
  145           150           155           160
Leu His Gly Asn Arg Leu Arg Leu Leu Thr Glu His Val Phe Arg Gly
           165           170           175
Leu Gly Ser Leu Asp Arg Leu Leu Leu His Gly Asn Arg Leu Gln Gly
           180           185           190
Val His Arg Ala Ala Phe His Gly Leu Ser Arg Leu Thr Ile Leu Tyr
   195           200           205
Leu Phe Asn Asn Ser Leu Ala Ser Leu Pro Gly Glu Ala Leu Ala Asp
   210           215           220
Leu Pro Ala Leu Glu Phe Leu Arg Leu Asn Ala Asn Pro Trp Ala Cys
  225           230           235           240
Asp Cys Arg Ala Arg Pro Leu Trp Ala Trp Phe Gln Arg Ala Arg Val
           245           250           255
Ser Ser Ser Asp Val Thr Cys Ala Thr Pro Pro Glu Arg Gln Gly Arg
           260           265           270
Asp Leu Arg Thr Leu Arg Asp Thr Asp Phe Gln Ala Cys Pro
   275           280           285

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<210> 3

<211> 420

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 3

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Met Leu Pro Gly Leu Arg Arg Leu Leu Gln Gly Pro Ala Ser Ala Cys
  1           5           10           15
Leu Leu Leu Thr Leu Leu Ala Leu Pro Pro Val Thr Pro Ser Cys Pro
   20           25           30
Met Leu Cys Thr Cys Tyr Ser Ser Pro Pro Thr Val Ser Cys Gln Ala
   35           40           45
Asn Asn Phe Ser Ser Val Pro Leu Ser Leu Pro Pro Ser Thr Gln Arg
   50           55           60
Leu Phe Leu Gln Asn Asn Leu Ile Arg Ser Leu Arg Pro Gly Thr Phe
  65           70           75           80
Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
           85           90           95
Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
   100           105           110
Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
   115           120           125
Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
   130           135           140
Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
  145           150           155           160
Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
           165           170           175
Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
           180           185           190
Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
   195           200           205
Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
  210           215           220

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Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala
 225 230 235 240
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu
 245 250 255
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu
 260 265 270
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys
 275 280 285
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp
 290 295 300
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser
 305 310 315 320
 Arg Ala Arg Gly Asn Ser Ser Ser Asn His Leu Tyr Gly Val Ala Glu
 325 330 335
 Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu Tyr Arg Asp Leu Pro
 340 345 350
 Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp Ala Pro Thr Glu Asp
 355 360 365
 Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln Arg Gly Glu Gln Thr
 370 375 380
 Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val
 385 390 395 400
 Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala
 405 410 415
 Pro His His Leu
 420

<210> 4

<211> 175

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 4

Asn Gly Asn Ala Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu
 1 5 10 15
 Trp Leu Arg Arg Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr
 20 25 30
 Pro Glu Leu Arg Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp
 35 40 45
 Phe Arg Asn Cys Thr Gly Pro Ala Ser Pro His Gln Ile Lys Ser His
 50 55 60
 Thr Leu Ser Thr Ser Asp Arg Ala Ala Arg Lys Glu His His Pro Ser
 65 70 75 80
 His Gly Ala Ser Arg Asp Lys Gly His Pro His Gly His Leu Pro Gly
 85 90 95
 Ser Arg Ser Gly Ser Lys Lys Pro Gly Lys Asn Cys Thr Ser His Arg
 100 105 110
 Asn Arg Asn Gln Ile Ser Lys Gly Ser Ala Gly Lys Glu Leu Pro Glu
 115 120 125
 Leu Gln Asp Tyr Ala Pro Asp Tyr Gln His Lys Phe Ser Phe Asp Ile
 130 135 140
 Met Pro Thr Ala Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr
 145 150 155 160
 Pro Ile Arg Ala Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr
 165 170 175

<210> 5

<211> 445
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 5

Met	Leu	Arg	Lys	Gly	Cys	Cys	Val	Glu	Leu	Leu	Leu	Leu	Leu	Ala	1	5	10	15
Gly	Glu	Leu	Pro	Leu	Ser	Gly	Gly	Cys	Pro	Arg	Asp	Cys	Val	Cys	Tyr	20	25	30
Pro	Ser	Pro	Met	Thr	Val	Ser	Cys	Gln	Ala	His	Asn	Phe	Ala	Ala	Ile	35	40	45
Pro	Glu	Gly	Ile	Pro	Glu	Asp	Ser	Glu	Arg	Ile	Phe	Leu	Gln	Asn	Asn	50	55	60
His	Ile	Thr	Phe	Leu	Gln	Gln	Gly	His	Phe	Ser	Pro	Ala	Met	Val	Thr	65	70	75
Leu	Trp	Ile	Tyr	Ser	Asn	Asn	Ile	Thr	Phe	Ile	Ala	Pro	Asn	Thr	Phe	80	85	90
Glu	Gly	Phe	Val	His	Leu	Glu	Glu	Leu	Asp	Leu	Gly	Asp	Asn	Arg	Gln	95	100	105
Leu	Arg	Thr	Leu	Ala	Pro	Glu	Thr	Phe	Gln	Gly	Leu	Val	Lys	Leu	His	110	115	120
Ala	Leu	Tyr	Leu	Tyr	Lys	Cys	Gly	Leu	Ser	Ser	Leu	Pro	Ala	Gly	Ile	125	130	135
Phe	Gly	Gly	Leu	His	Ser	Leu	Gln	Tyr	Leu	Tyr	Leu	Gln	Asp	Asn	His	140	145	150
Ile	Glu	Tyr	Leu	Gln	Asp	Asp	Ile	Phe	Val	Asp	Leu	Val	Asn	Leu	Ser	155	160	165
His	Leu	Phe	Leu	His	Gly	Asn	Lys	Leu	Trp	Ser	Leu	Gly	Gln	Gly	Ile	170	175	180
Phe	Arg	Gly	Leu	Val	Asn	Leu	Asp	Arg	Leu	Leu	Leu	His	Glu	Asn	Gln	185	190	195
Leu	Gln	Trp	Val	His	His	Lys	Ala	Phe	His	Asp	Leu	His	Arg	Leu	Thr	200	205	210
Thr	Leu	Phe	Leu	Phe	Asn	Ser	Leu	Thr	Glu	Leu	Gln	Gly	Asp	Cys		215	220	225
Leu	Ala	Pro	Leu	Val	Ala	Leu	Glu	Phe	Leu	Arg	Leu	Asn	Gly	Asn	Ala	230	235	240
Trp	Asp	Cys	Gly	Cys	Arg	Ala	Arg	Ser	Leu	Trp	Glu	Trp	Leu	Arg	Arg	245	250	255
Phe	Arg	Gly	Ser	Ser	Ser	Val	Val	Pro	Cys	Ala	Thr	Pro	Glu	Leu	Arg	260	265	270
Gln	Gly	Gln	Asp	Leu	Lys	Ser	Leu	Arg	Val	Glu	Asp	Phe	Arg	Asn	Cys	275	280	285
Thr	Gly	Pro	Ala	Ser	Pro	His	Gln	Ile	Lys	Ser	His	Thr	Leu	Ser	Thr	290	295	300
Ser	Asp	Arg	Ala	Ala	Arg	Lys	Glu	His	His	Pro	Ser	His	Gly	Ala	Ser	305	310	315
Arg	Asp	Lys	Gly	His	Pro	His	Gly	His	Leu	Pro	Gly	Ser	Arg	Ser	Gly	320	325	330
Ser	Lys	Lys	Pro	Gly	Lys	Asn	Cys	Thr	Ser	His	Arg	Asn	Arg	Asn	Gln	335	340	345
Ile	Ser	Lys	Gly	Ser	Ala	Gly	Lys	Glu	Leu	Pro	Glu	Leu	Gln	Asp	Tyr	350	355	360
Ala	Pro	Asp	Tyr	Gln	His	Lys	Phe	Ser	Phe	Asp	Ile	Met	Pro	Thr	Ala	365	370	375
Arg	Pro	Lys	Arg	Lys	Gly	Lys	Cys	Ala	Arg	Arg	Thr	Pro	Ile	Arg	Ala	380	385	390
																395	400	405
																410	415	

Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr Ala Leu Gly Val Ser
 420 425 430
 Leu Leu Ala Trp Ile Leu Gly Leu Val Val Ser Leu Arg
 435 440 445

<210> 6
 <211> 2215
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 6
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 gccccgtccc gtcggggccg atggctcctt cagaggcacg gagtccgggg ggcgcagggt 180
 agagctccgc agccccgcta cgtagcccg gactcccggg tccttacgga gccccgcgga 240
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 cctatgctct gcacctgcta ctctctccg cccacagtga gctgccaggc caacaacttc 480
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 aacaacctct ccaccatcta ccctggcacc ttccgccatc tgcaggccct agaggaaactg 660
 gacctcggtg acaatcgga cctgcgctcc ctggagcctg acaccttcca gggcctggag 720
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 tacggcgtgg ccgagcggg cgctcccccc gcagacccat ccagctcta ccgagacctg 1380
 cccgccgagg actcgcgggg gcgtcagggc ggggacgcgc ccaactgagga cgactactgg 1440
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 gcgcccgcgg actcgcgtgg ccccgctgc tcggccgggc tgcgcacccc tctgctctgc 1560
 ctcttgctcc tggctcccca tcacctctga ctgcggtgct ccgatggaag agaccacgtt 1620
 cttcgccccg ctccccttct ctgccccacg gagctgagge tccgaacttg ccccttgttt 1680
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 acccaggaca ctttttaggt gcctggagag atttctctc accatggccc ctgtgtgggtg 2160
 aagataaaaag aaattgtttg ggggaaaaaa tttattaaaa aattctatta ttttt 2215

<210> 7
 <211> 1422
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 7

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acaagctgcc	cccagcaggg	cctgcaggct	gtacccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcattg	240
cggaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
ttcactggtc	tgaccctcct	ggagcaacta	gatcttagtg	acaatgcaca	gctccgtgtc	360
gtggacccca	ccacgttcct	tggcctgggc	cacctgcaca	cgctgcacct	agaccgatgc	420
ggcctgcagg	agctggggcc	tggcctattc	cgtgggctgg	cagctctgca	gtacctctac	480
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ctccccgcag	aggtcctagt	gcccctgagg	tctctgcagt	acctgcgact	caatgacaac	780
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gggggttccg	agccccgggg	actgccacc	acgggtcccc	gcaggaggcc	aggttgttcc	1260
agaaagaacc	gcacccttag	ccactgccgt	ctgggcccagg	caggaagtgg	gagcagtggg	1320
actggggatg	cagaagggtc	gggggcccctg	cctgcctctg	cctgcagcct	tgctcctctg	1380
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<210> 8

<211> 2601

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<221> misc_feature

<222> (0)...(0)

<223> n = a, t, c, or g

<400> 8

tgccggccgc	ggcgctttcc	cggagctggg	ctgtgcgtgc	gagcgccctt	ttgcagcagc	60
cgctgcccga	ggggggcggg	aagaggggac	atcggttagc	cgccagggg	gcggcgctcc	120
ccctcaaaac	cgctgcaaa	gtgtttgggg	cggcagaatc	aggccgcgg	ctcgggtggg	180
caagccactc	gccccggggc	tgagagagcg	cacggcggtg	gttggcagcg	ccgcgggtgc	240
tagcaggcgc	cggtgcctcg	ggcgccgngc	ttgggctcac	catgcccctg	cgggaccggg	300
ccgcggggca	caagcggatt	cccggcttgc	ccccgcctcg	acgcgctcgg	attagctgta	360
gctggcgccc	agggatttga	atctggaccc	caggagggag	cgcgcctagg	ccgacctcgg	420
aacggcgccc	ccgcggccaa	catgcttcgc	aaagggtgct	gtgtggaatt	gctgctgttg	480
ctgctggctg	gagagctacc	tctgagtggt	ggttgtcctc	gagactgtgt	gtgctacccc	540
tcgcccattga	ctgtcagttg	ccaggcacac	aactttgccc	ccatccccga	gggcatccca	600
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aacacctttg	agggctttgt	gcactctggg	gagctagacc	ttggagacaa	ccggcagctt	780
cgaacgctgg	caccgcagac	cttccaaggc	ctgggtgaagc	ttcacgccct	ctacctctac	840
aagtgcggac	tgagctccct	gcctgcgggc	atctttgggtg	gcctgcacag	cctgcagtac	900
ctctacttgc	aggacaacca	tattgagtac	ctccaagatg	acatctttgt	ggacctgggtc	960
aacctcagtc	acttgtttct	ccatggcaac	aagctatgga	gcctggggcca	gggcatcttc	1020
cggggcctgg	tgaacctgga	ccggttgctg	ctgcatgaga	accagctaca	gtgggtccac	1080
cacaaggctt	tccatgacct	ccacaggcta	accacctctc	ttctcttcaa	caatagcctc	1140
accgagctgc	aggggtgactg	cctggccccc	ctggtggccc	tggagtctct	tcgcctcaat	1200

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aagtcgctga gggttgagga cttccggaac tgcactggac cagcgtctcc tcaccagatc 1380
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tttgacatca tgcccactgc acgacccaag aggaagggca agtgtgcccg caggaccccc 1680
atccgtgccc ccagtggggt gcagcaggcc tcctcaggca cggccctcgg ggtctcactc 1740
ctggcctgga tactggggct ggtggtatct ctccgctgag gacccagggc accgtcaccc 1800
agcactgcca cctgtccagc aaggaaacag aatcttttct tcttttcttt tcttttcttc 1860
taagtggaaag atctgctggg ttccaggaaa aggctgctaa aaccttcagt ccagtgtgga 1920
ccttttttgtt ggattaaagc ccaacggtac agctgtagac aggaagggga gcacatctta 1980
cctggctgtc ctgaccgagc acctccggac agtattccac tcagccagtg gtcaaagggc 2040
acaccaagtg agtcgttagt ggtgtcagga catgtgcccc ttgaagaaat gggcttgcg 2100
aatcctggtc acttggaag aagggctgaa ggaccctgct ggtttcggaa ggagcaggac 2160
tcagaacaag gtcacccag agtcagctgg ggcaaacagc aatctcagag cactcttggt 2220
cttgccctgag atcacttagt taactggccc tgtccaatcc tatgcctccc tcagtcccta 2280
cccctgaggg taatgcctct cattcctgaa gtctcaggca gtcctggcag acttgctggg 2340
gttcaagaac caatcaccaa aggagagatc gccagaggat gacatataga actttactcg 2400
taatgagagt cacacagaag gtgcagtttt atacctatgt ccacttatat atatattctc 2460
actctgacca cacatccaca taatatatat atatataata taaatatata aatgcacagg 2520
tcccccaacc cactccttac caaactgtat gtcttatcat gtttataaac tatacgggaa 2580
cctaaaaaaa aaaaagtga a 2601

```

<210> 9

<211> 445

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 9

```

Met Leu Arg Lys Gly Cys Cys Val Glu Leu Leu Leu Leu Leu Ala
 1          5          10          15
Gly Glu Leu Pro Leu Ser Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr
          20          25          30
Pro Ser Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Ala Ala Val
          35          40          45
Pro Glu Gly Ile Pro Glu Asp Ser Glu Arg Ile Phe Leu Gln Asn Asn
          50          55          60
His Ile Thr Phe Leu Gln Gly His Phe Ser Pro Ala Met Val Thr
          65          70          75          80
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Phe Ile Ala Pro Asn Thr Phe
          85          90          95
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln
          100          105          110
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His
          115          120          125
Ala Leu Tyr Leu Tyr Lys Cys Gly Leu Ser Ser Leu Pro Ala Gly Ile
          130          135          140
Phe Gly Gly Leu His Ser Leu Gln Tyr Leu Tyr Leu Gln Asp Asn His
          145          150          155          160
Ile Glu Tyr Leu Gln Asp Asp Ile Phe Val Asp Leu Val Asn Leu Ser
          165          170          175
His Leu Phe Leu His Gly Asn Lys Leu Trp Ser Leu Gly Gln Gly Ile
          180          185          190
Phe Arg Gly Leu Val Asn Leu Asp Arg Leu Leu Leu His Glu Asn Gln
          195          200          205

```


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```

Leu Gln Trp Val His His Lys Ala Phe His Asp Leu His Arg Leu Thr
 210                215                220
Thr Leu Phe Leu Phe Asn Ser Leu Thr Glu Leu Gln Gly Asp Cys
225                230                235                240
Leu Ala Pro Leu Val Ala Leu Glu Phe Leu Arg Leu Asn Gly Asn Ala
                245                250                255
Trp Asp Cys Gly Cys Arg Ala Arg Ser Leu Trp Glu Trp Leu Arg Arg
                260                265                270
Phe Arg Gly Ser Ser Ser Val Val Pro Cys Ala Thr Pro Glu Leu Arg
                275                280                285
Gln Gly Gln Asp Leu Lys Ser Leu Arg Val Glu Asp Phe Arg Asn Cys
290                295                300
Thr Gly Pro Ala Ser Pro His Gln Ile Lys Ser His Thr Leu Ser Thr
305                310                315                320
Ser Asp Arg Ala Ala Arg Lys Glu His His Pro Ser His Gly Ala Ser
                325                330                335
Arg Asp Lys Gly His Pro His Gly His Leu Pro Gly Ser Arg Ser Gly
                340                345                350
Ser Lys Lys Pro Gly Lys Asn Cys Thr Ser His Arg Asn Arg Asn Gln
                355                360                365
Ile Ser Lys Gly Ser Ala Gly Lys Glu Leu Pro Glu Leu Gln Asp Tyr
                370                375                380
Ala Pro Asp Tyr Gln His Lys Phe Ser Phe Asp Ile Met Pro Thr Ala
385                390                395                400
Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr Pro Ile Arg Ala
                405                410                415
Pro Ser Gly Val Gln Gln Ala Ser Ser Gly Thr Ala Leu Gly Val Ser
                420                425                430
Leu Leu Ala Trp Ile Leu Gly Leu Val Val Ser Leu Arg
                435                440                445

```

<210> 10

<211> 473

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 10

```

Met Ala Ala Trp Pro Ser Arg Val Gly Ala Trp Arg Pro Gly Ala Gly
 1                5                10                15
Pro Pro Thr Ser Ala Arg Leu Pro Gly Arg Leu Gly Gln Leu Gly Pro
                20                25                30
Trp Lys Lys Val Gly Cys Cys Val Glu Leu Leu Leu Leu Val Ala
                35                40                45
Ala Glu Leu Pro Leu Gly Gly Gly Cys Pro Arg Asp Cys Val Cys Tyr
                50                55                60
Pro Ala Pro Met Thr Val Ser Cys Gln Ala His Asn Phe Ala Ala Ile
65                70                75                80
Pro Glu Gly Ile Pro Val Asp Ser Glu Arg Val Phe Leu Gln Asn Asn
                85                90                95
Arg Ile Gly Leu Leu Gln Pro Gly His Phe Ser Pro Ala Met Val Thr
                100                105                110
Leu Trp Ile Tyr Ser Asn Asn Ile Thr Tyr Ile His Pro Ser Thr Phe
                115                120                125
Glu Gly Phe Val His Leu Glu Glu Leu Asp Leu Gly Asp Asn Arg Gln
                130                135                140
Leu Arg Thr Leu Ala Pro Glu Thr Phe Gln Gly Leu Val Lys Leu His
145                150                155                160

```

```
<210> 11
<211> 474
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence:/Note =
        Synthetic Construct
```

<400> 11															
Met	Leu	Pro	Gly	Leu	Arg	Arg	Leu	Leu	Gln	Gly	Pro	Ala	Ser	Ala	Cys
1				5					10					15	
Leu	Leu	Leu	Thr	Leu	Leu	Ala	Leu	Pro	Pro	Val	Thr	Pro	Ser	Cys	Pro
			20					25					30		
Met	Leu	Cys	Thr	Cys	Tyr	Ser	Ser	Pro	Pro	Thr	Val	Ser	Cys	Gln	Ala
		35					40					45			
Asn	Asn	Phe	Ser	Ser	Val	Pro	Leu	Ser	Leu	Pro	Pro	Ser	Thr	Gln	Arg
	50					55					60				
Leu	Phe	Leu	Gln	Asn	Asn	Leu	Ile	Arg	Ser	Leu	Arg	Pro	Gly	Thr	Phe
65					70					75					80

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```

Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
      85                      90                      95
Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
      100                    105                    110
Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
      115                    120                    125
Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
      130                    135                    140
Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
      145                    150                    155
Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
      165                    170                    175
Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
      180                    185                    190
Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
      195                    200                    205
Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
      210                    215                    220
Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala
      225                    230                    235
Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu
      245                    250                    255
Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu
      260                    265                    270
Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys
      275                    280                    285
Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp
      290                    295                    300
Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Ser Pro Phe Arg Pro Phe
      305                    310                    315
Gln Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys
      325                    330                    335
Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly Arg
      340                    345                    350
Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg Val Pro Pro Gly Asp
      355                    360                    365
Thr Pro Pro Gly Asn Gly Ser Gly Pro Arg His Ile Asn Asp Ser Pro
      370                    375                    380
Phe Gly Thr Leu Pro Gly Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg
      385                    390                    395
Pro Gly Gly Ser Glu Pro Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg
      405                    410                    415
Arg Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg Ser His Cys Arg Leu
      420                    425                    430
Gly Gln Ala Gly Ser Gly Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser
      435                    440                    445
Gly Ala Leu Pro Ala Leu Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala
      450                    455                    460
Leu Val Leu Trp Thr Val Leu Gly Pro Cys
      465                    470

```

<210> 12

<211> 1425

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 12

```

atgctgcccc ggctccggcg cctgctgcaa ggtcctgcct cagcctgcct cctgctgaca      60
ctcctggccc tccctcctgt gacccccagc tgccctatgc tctgcacctg ctactcctct      120
ccgcccacag tgagctgcca ggccaacaac ttctcctcgg tgccgctgtc cttgccaccc      180
agtacacagc gactcttctt gcagaacaac ctcatctcgt cactgcggcc aggaactttt      240
gggcccacc tgctaccctt gtggctcttc tccaacaacc tctccaccat ctaccctggc      300
accttccgcc atctgcaggc cctagaggaa ctggacctcg gtgacaatcg gcacctgcgc      360
tccctggagc ctgacacctt ccagggcctg gagaggctgc agtcactaca tctgtaccgg      420
tgccagctca gcagtctgcc tggcaacatc ttccgaggcc tggtcagcct acagtacctc      480
tacctccagg agaacagcct gctccaccta caggatgact tggtcgccga cctggccaac      540
ctgagccacc ttttctctca cgggaaccgc ctgcggtgc tcacggagca cgtgttccgc      600
ggcttgggca gcctggaccg gctgctgctg cacgggaacc ggctgcaggg cgtacaccgc      660
gcagccttcc acggtctcag ccgcctcacc atcctttacc tgttcaacaa cagcctggcc      720
tcgctgccgg gagaggcgtt ggctgacctg ccagcgtctg agttcctgcg gctcaaccgc      780
aaccctggg cgtgcgactg ccgcgtcctg ccgctctggg cttggttcca gcgcgcgcgg      840
gtgtccagct ccgacgtgac ctgcgccacc ccgcccagc gccagggccg ggacctgcgc      900
acgctgcgcg acaccgattt ccaagcgtgc ccgccgcca ctagtccctt ccgtcccttc      960
cagaccaatc agctcactga tgaggagctg ctgggcctcc ccaagtgtg cccagccggat     1020
gctgcagaca aggcctcagt actggaaccc gggaggccgg cgtctgctgg aaatgcactc     1080
aagggacgtg tgcctcccgg tgacactcca ccaggcaatg gctcaggccc acggcacatc     1140
aatgactctc catttgggac tttgcccggc tctgcagagc cccactgac tgccctgcgg     1200
cctgggggtt ccgagccccc gggactgccc accacgggtc cccgcaggag gccaggttgt     1260
tccagaaaga accgcaccgc tagccactgc cgtctggggc aggcaggaag tgggagcagt     1320
ggaactgggg atgcagaagg ttccggggcc ctgcctgccc tggcctgcag ccttgtctct     1380
ctgggccttg cactggtact ttggaccgtg ctcgggcctt gctga                      1425

```

<210> 13

<211> 420

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 13

```

Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
 1              5              10              15

Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
                20                25                30
Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
 35              40              45
Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
 50              55              60
His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
 65              70              75              80
Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile
                85                90                95
Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu
                100               105               110
Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly
                115               120               125
Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
 130              135              140
Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
 145              150              155              160
Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp
                165               170               175
Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser

```

180

185

190

Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
 195 200 205
 Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
 210 215 220
 Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
 225 230 235 240
 Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
 245 250 255
 Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
 260 265 270
 Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
 275 280 285
 Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser
 290 295 300
 Asp Leu Glu Gly Cys Ala Val Ala Thr Ser Pro Thr Arg Pro Gly Ser
 305 310 315 320
 Arg Ala Arg Gly Asn Ser Ser Ser Asn His Leu Tyr Gly Val Ala Glu
 325 330 335
 Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu Tyr Arg Asp Leu Pro
 340 345 350
 Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp Ala Pro Thr Glu Asp
 355 360 365
 Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln Arg Gly Glu Gln Thr
 370 375 380
 Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val
 385 390 395 400
 Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala
 405 410 415
 Pro His His Leu
 420

<210> 14

<211> 1263

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 14

atgaagaggg	cgctcctccgg	aggaagccgg	ctgctggcat	gggtggtatg	gctacaggcc	60
tggagggtag	caacgccctg	ccctggtgcc	tgtgtgtgct	acaatgagcc	caaggtcaca	120
acaagctgcc	cccagcaggg	cctgcaggct	gtacccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcatgc	240
cggaaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
ttcactggtc	tgaccctcct	ggagcaacta	gatcttagtg	acaatgcaca	gctccgtgtc	360
gtggacccca	ccacgttccg	tggcctgggc	cacctgcaca	cgctgcacct	agaccgatgc	420
ggcctgcagg	agctggggcc	tggcctattc	cgtgggctgg	cagctctgca	gtacctctac	480
ctacaagaca	acaacctgca	ggcacttccc	gacaacacct	tccgagacct	gggcaacctc	540
acgcattctct	ttctgcatgg	caaccgtatc	cccagtgttc	ctgagcacgc	tttccgtggc	600
ttgcacagtc	ttgaccgtct	cctcttgcac	cagaaccatg	tggctcgtgt	gcacccacat	660
gccttccggg	accttggccg	actcatgacc	ctctacctgt	ttgccaacaa	cctctccatg	720
ctccccgcag	aggctcctagt	gcccctgagg	tctctgcagt	acctgcgact	caatgacaac	780
ccctgggtgt	gtgactgcag	ggcacgtccg	ctctgggcct	ggctgcagaa	gttccgaggt	840
tctcatcccg	agggtccctg	caacctaccc	caacgcctgg	caggccgtga	tctgaagcgc	900
ctggctgcca	gtgacttaga	gggttgtgtc	gtggctacta	gtccacacgc	gccgggcagc	960
cgcgcccgcg	gcaacagctc	ttccaaccac	ctgtacggcg	tggccgaggc	gggcgctccc	1020
cccgagagcc	catccacgct	ctaccgagac	ctgcccgcgc	aggactcgcg	ggggcgctcag	1080
ggcgggggacg	cgcccactga	ggacgactac	tgggggggct	acggcgggcg	ggaccagcga	1140
ggcgagcaga	cgtgtcccgg	ggccgcgtgc	caggcgcccg	cggactcgcg	tggccccgtg	1200

ctctcggccg ggctgcgcac ccctctgctc tgctctttgc tcttggctcc ccatacctc 1260
tga 1263

<210> 15

<211> 415

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 15

Met	Leu	Arg	Lys	Gly	Cys	Cys	Val	Glu	Leu	Leu	Leu	Leu	Leu	Leu	Ala
1				5				10						15	
Gly	Glu	Leu	Pro	Leu	Ser	Gly	Gly	Cys	Pro	Arg	Asp	Cys	Val	Cys	Tyr
			20					25					30		
Pro	Ser	Pro	Met	Thr	Val	Ser	Cys	Gln	Ala	His	Asn	Phe	Leu	Gln	Asn
		35					40					45			
Pro	Glu	Gly	Ile	Pro	Glu	Asp	Ser	Glu	Arg	Ile	Phe	Leu	Gln	Asn	Asn
	50					55					60				
His	Ile	Thr	Phe	Leu	Gln	Gln	Gly	His	Phe	Ser	Pro	Ala	Met	Val	Thr
65					70					75					80
Leu	Trp	Ile	Tyr	Ser	Asn	Asn	Ile	Thr	Phe	Ile	Ala	Pro	Asn	Thr	Phe
			85						90					95	
Glu	Gly	Phe	Val	His	Leu	Glu	Glu	Leu	Asp	Leu	Gly	Asp	Asn	Arg	Gln
			100					105					110		
Leu	Arg	Thr	Leu	Ala	Pro	Glu	Thr	Phe	Gln	Gly	Leu	Val	Lys	Leu	His
		115					120					125			
Ala	Leu	Tyr	Leu	Tyr	Lys	Cys	Gly	Leu	Ser	Ser	Leu	Pro	Ala	Gly	Ile
	130					135					140				
Phe	Gly	Gly	Leu	His	Ser	Leu	Gln	Tyr	Leu	Tyr	Leu	Gln	Asp	Asn	His
145					150					155					160
Ile	Glu	Tyr	Leu	Gln	Asp	Asp	Ile	Phe	Val	Asp	Leu	Val	Asn	Leu	Ser
			165						170					175	
His	Leu	Phe	Leu	His	Gly	Asn	Lys	Leu	Trp	Ser	Leu	Gly	Gln	Gly	Ile
		180						185					190		
Phe	Arg	Gly	Leu	Val	Asn	Leu	Asp	Arg	Leu	Leu	Leu	His	Glu	Asn	Gln
		195					200					205			
Leu	Gln	Trp	Val	His	His	Lys	Ala	Phe	His	Asp	Leu	His	Arg	Leu	Thr
	210					215					220				
Thr	Leu	Phe	Leu	Phe	Asn	Asn	Ser	Leu	Thr	Glu	Leu	Gln	Gly	Asp	Cys
225					230					235					240
Leu	Ala	Pro	Leu	Val	Ala	Leu	Glu	Phe	Leu	Arg	Leu	Asn	Gly	Asn	Ala
			245						250					255	
Trp	Asp	Cys	Gly	Cys	Arg	Ala	Arg	Ser	Leu	Trp	Glu	Trp	Leu	Arg	Arg
		260						265					270		
Phe	Arg	Gly	Ser	Ser	Ser	Val	Val	Pro	Cys	Ala	Thr	Pro	Glu	Leu	Arg
		275					280					285			
Gln	Gly	Gln	Asp	Leu	Lys	Ser	Leu	Arg	Val	Glu	Asp	Phe	Arg	Asn	Cys
	290					295					300				
Thr	Gly	Pro	Thr	Ser	Pro	Thr	Arg	Pro	Gly	Ser	Arg	Ala	Arg	Gly	Asn
305					310					315					320
Ser	Ser	Ser	Asn	His	Leu	Tyr	Gly	Val	Ala	Glu	Ala	Gly	Ala	Pro	Pro
			325						330					335	
Ala	Asp	Pro	Ser	Thr	Leu	Tyr	Arg	Asp	Leu	Pro	Ala	Glu	Asp	Ser	Arg
		340					345					350			
Gly	Arg	Gln	Gly	Gly	Asp	Ala	Pro	Thr	Glu	Asp	Asp	Tyr	Trp	Gly	Gly
	355					360						365			
Tyr	Gly	Gly	Glu	Asp	Gln	Arg	Gly	Glu	Gln	Thr	Cys	Pro	Gly	Ala	Ala
	370					375					380				

Cys Gln Ala Pro Ala Asp Ser Arg Gly Pro Val Leu Ser Ala Gly Leu
 385 390 395 400
 Arg Thr Pro Leu Leu Cys Leu Leu Leu Leu Ala Pro His His Leu
 405 410 415

<210> 16
 <211> 1245
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 16
 atgcttcgca aagggtgctg tgtggaattg ctgctgttgc tgctggctgg agagctacct 60
 ctgagtgggtg gttgtcctcg ctgtgtgtgc tacccctcgc ccatgactgt cagttgccag 120
 gcacacaact ttgccgccat ccccagaggc atcccagagg acagcgagcg catcttctcg 180
 cagaacaatc acatcacctt cctccagcag ggccacttca gcccgcgat ggtcaccctc 240
 tggatctact ccaacaacat cactttcatt gctcccaaca ctttgaggg ctttgtgcat 300
 ctggaggagc tagaccttg agacaaccgg cagcttcgaa cgctggcacc cgagaccttc 360
 caaggcctgg tgaagcttca cgccctctac ctctacaagt gcggactgag ctccctgctt 420
 gcgggcatct ttggtggcct gcacagcctg cagtacctct acttgcagga caaccatatt 480
 gagtacctcc aagatgacat ctttgtggac ctgggtcaacc tcagtcactt gtttctccat 540
 ggcaacaagc tatggagcct gggccagggc atcttccggg gcctggtgaa cctggaccgg 600
 ttgctgctgc atgagaacca gctacagtgg gtccaccaca aggcctttcca tgacctccac 660
 aggctaacca ccctctttct cttcaacaat agcctcaccg agctgcaggg tgactgcctg 720
 gccccctgg tggccctgga gtttcttctc ctcaatggga atgcttgga ctgtggctgc 780
 cgggcacggt ccctgtggga atggctgcga aggttccgtg gctccagctc tgttgtcccc 840
 tcgcgcgactc cagagctgcg gcaaggacag gacctgaagt cgctgagggt tgaggacttc 900
 cggaactgca ctggaccaac tagtccacg cgcccgggca gccgcgccc cggaacacgc 960
 tcttccaacc acctgtacgg cgtggccgag gcgggcgctc ccccgccaga cccatccacg 1020
 ctctaccgag acctgcccgc cgaggactcg cggggcgctc agggcgggga cgcgcccact 1080
 gaggacgact actggggggg ctacggcggc gaggaccagc gaggcgagca gacgtgtccc 1140
 ggggccgcgt gccaggcgcc cgcggactcg cgtggccccg tgctctcggc cgggctgcgc 1200
 acccctctgc tctgcctctt gctcctggct ccccatcacc tctga 1245

<210> 17
 <211> 452
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 17
 Met Leu Pro Gly Leu Arg Arg Leu Leu Gln Gly Pro Ala Ser Ala Cys
 1 5 10 15
 Leu Leu Leu Thr Leu Leu Ala Leu Pro Pro Val Thr Pro Ser Cys Pro
 20 25 30
 Met Leu Cys Thr Cys Tyr Ser Ser Pro Pro Thr Val Ser Cys Gln Ala
 35 40 45
 Asn Asn Phe Ser Ser Val Pro Leu Ser Leu Pro Pro Ser Thr Gln Arg
 50 55 60
 Leu Phe Leu Gln Asn Asn Leu Ile Arg Ser Leu Arg Pro Gly Thr Phe
 65 70 75 80
 Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
 85 90 95
 Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
 100 105 110

Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
 115 120 125
 Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
 130 135 140
 Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
 145 150 155 160
 Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
 165 170 175
 Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
 180 185 190
 Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
 195 200 205
 Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
 210 215 220
 Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala
 225 230 235 240
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu
 245 250 255
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu
 260 265 270
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys
 275 280 285
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp
 290 295 300
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser
 305 310 315 320
 Arg Ala Arg Gly Asn Thr Ser Pro Gly Arg Pro Ala Ser Ala Gly Asn
 325 330 335
 Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr Pro Pro Gly Asn Gly
 340 345 350
 Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe Gly Thr Leu Pro Gly
 355 360 365
 Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro Gly Gly Ser Glu Pro
 370 375 380
 Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg
 385 390 395 400
 Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Gln Ala Gly Ser Gly
 405 410 415
 Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu
 420 425 430
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val
 435 440 445
 Leu Gly Pro Cys
 450

<210> 18

<211> 1359

<212> DNA

<213> Artificial Sequence

<220>

 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 18

atgctgcccg	ggctccggcg	cctgctgcaa	ggctcctgcct	cagcctgcct	cctgctgaca	60
ctcctggccc	tccctcctgt	gacccccagc	tgccctatgc	tctgcacctg	ctactcctct	120
ccgcccacag	tgagctgcca	ggccaacaac	ttctcctcgg	tgccgctgtc	cttgccaccc	180
agtacacagc	gactcttctt	gcagaacaac	ctcattcgct	cactgcggcc	aggaactttt	240
gggcccaccc	tgctcaccct	gtggctcttc	tccaacaacc	tctccaccat	ctaccctggc	300
accttccgcc	atctgcaggc	cctagaggaa	ctggacctcg	gtgacaatcg	gcacctgcgc	360


```

tccctggagc ctgacacctt ccagggcctg gagaggctgc agtcactaca tctgtaccgg      420
tgccagctca gcagtctgcc tggcaacatc ttccgaggcc tggtcagcct acagtacctc      480
tacctccagg agaacagcct gctccaccta caggatgact tggtcgccga cctggccaac      540
ctgagccacc ttttctcca cggaaccgc ctgcggctgc tcacggagca cgtgttccgc      600
ggcttgggca gcttgaccg gctgctgctg caccggaacc ggctgcaggg cgtacaccgc      660
gcagccttcc acggtctcag ccgcctcacc atcctttacc tgttcaacaa cagcctggcc      720
tcgctgccgg gagaggcgct ggctgacctg ccagcgctcg agttcctgcg gctcaacgcc      780
aaccctggg cgtgcgactg ccgcgctcgg ccgctctggg cttggttcca gcgcgcgcgg      840
gtgtccagct ccgacgtgac ctgcgccacc ccgcccagag gccagggccg ggacctgcgc      900
acgctgcgcg acaccgattt ccaagcgtgc ccgcgcgcca caccacgcg gccgggcagc      960
cgcgcccgcg gcaacactag tcccgggagg ccggcgctcg ctggaaatgc actcaaggga     1020
cgtgtgcctc ccggtgacac tccaccaggc aatggctcag gccacggca catcaatgac     1080
tctccatttg ggactttgcc gggctctgca gagccccac tgactgcctt gcggcctggg     1140
ggttccgagc ccccgggact gccaccacg ggtcccgca ggaggccagg ttgttccaga     1200
aagaaccgca cccgtagcca ctgccgtctg ggccaggcag gaagtgggag cagtgggaact     1260
ggggatgcag aagggtcggg ggccctgcct gccctggcct gcagccttgc tcctctgggc     1320
cttgcaactgg tactttggac cgtgctcggg ccctgctga      1359

```

<210> 19

<211> 441

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 19

```

Met Lys Arg Ala Ser Ser Gly Gly Ser Arg Leu Leu Ala Trp Val Leu
 1              5              10              15
Trp Leu Gln Ala Trp Arg Val Ala Thr Pro Cys Pro Gly Ala Cys Val
              20              25              30
Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln Gly Leu
              35              40              45
Gln Ala Val Pro Thr Gly Ile Pro Ala Ser Ser Gln Arg Ile Phe Leu
              50              55              60
His Gly Asn Arg Ile Ser Tyr Val Pro Ala Ala Ser Phe Gln Ser Cys
65              70              75              80
Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Ala Leu Ala Gly Ile
              85              90              95
Asp Ala Ala Ala Phe Thr Gly Leu Thr Leu Leu Glu Gln Leu Asp Leu
              100             105             110
Ser Asp Asn Ala Gln Leu Arg Val Val Asp Pro Thr Thr Phe Arg Gly
              115             120             125
Leu Gly His Leu His Thr Leu His Leu Asp Arg Cys Gly Leu Gln Glu
              130             135             140
Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr Leu Tyr
145             150             155             160
Leu Gln Asp Asn Asn Leu Gln Ala Leu Pro Asp Asn Thr Phe Arg Asp
              165             170             175
Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile Pro Ser
              180             185             190
Val Pro Glu His Ala Phe Arg Gly Leu His Ser Leu Asp Arg Leu Leu
              195             200             205
Leu His Gln Asn His Val Ala Arg Val His Pro His Ala Phe Arg Asp
210             215             220
Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu Ser Met
225             230             235             240
Leu Pro Ala Glu Val Leu Val Pro Leu Arg Ser Leu Gln Tyr Leu Arg
              245             250             255

```

```

Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro Leu Trp
      260      265      270
Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro Cys Asn
      275      280      285
Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala Ala Ser
      290      295      300
Asp Leu Glu Gly Cys Ala Val Ala Ser Gly Pro Phe Arg Pro Phe Gln
      305      310      315      320
Thr Asn Gln Leu Thr Asp Glu Glu Leu Leu Gly Leu Pro Lys Cys Cys
      325      330      335
Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Thr Ser Ser Asn His Leu
      340      345      350
Tyr Gly Val Ala Glu Ala Gly Ala Pro Pro Ala Asp Pro Ser Thr Leu
      355      360      365
Tyr Arg Asp Leu Pro Ala Glu Asp Ser Arg Gly Arg Gln Gly Gly Asp
      370      375      380
Ala Pro Thr Glu Asp Asp Tyr Trp Gly Gly Tyr Gly Gly Glu Asp Gln
      385      390      395      400
Arg Gly Glu Gln Thr Cys Pro Gly Ala Ala Cys Gln Ala Pro Ala Asp
      405      410      415
Ser Arg Gly Pro Val Leu Ser Ala Gly Leu Arg Thr Pro Leu Leu Cys
      420      425      430
Leu Leu Leu Leu Ala Pro His His Leu
      435      440

```

<210> 20

<211> 1326

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 20

```

atgaagaggg cgctcctccg aggaagcccg ctgctggcat ggggtgttatg gctacaggcc      60
tggagggtag caacgccctg ccttggtgcc tgtgtgtgct acaatgagcc caaggtcaca      120
acaagctgcc ccagcaggg cctgcaggct gtaccactg gcatcccagc ctccagccag      180
agaatcttcc tgcacggcaa ccgaatctct tacgtgccag ccgccagctt ccagtcatgc      240
cggaatctca ccctcctgtg gctgcaacta aatgcgctgg ccgggattga tgccgcggcc      300
ttcactggtc tgaccctcct ggagcaacta gatcttagtg acaatgcaca gctccgtgtc      360
gtggacccca ccacgttccg tggcctgggc cacctgcaca cgctgcacct agaccgatgc      420
ggcctgcagg agctggggcc tggcctattc cgtgggctgg cagctctgca gtacctctac      480
ctacaagaca acaacctgca ggcacttccc gacaacacct tccgagacct gggcaacctc      540
acgcatctct ttctgcatgg caaccgtatc cccagtgttc ctgagcacgc tttccgtggc      600
ttgcacagtc ttgaccgtct cctcttgac cagaaccatg tggctcgtgt gcacccacat      660
gccttccggg accttggccg actcatgacc ctctacctgt ttgccaacaa cctctccatg      720
ctcccgcag aggtcctagt gcccctgagg tctctgcagt acctgcgact caatgacaac      780
ccttgggtgt gtgactgcag ggcacgtccg ctctgggcct ggctgcagaa gttccgaggt      840
tcctcatccg aggtgccctg caacctaccc caacgcctgg caggccgtga tctgaagcgc      900
ctggctgcca gtgacttaga gggttgtgct gtggcttcgg ggcccttccg tcccttccag      960
accaatcagc tcaactgatga ggagctgctg ggcctcccca agtgcctgcca gccggatgct      1020
gcagacaagg cctcagtaac tagttccaac cacctgtacg gcgtggccga ggcggggcgt      1080
ccccccgcag acccatccac gctctaccga gacctgcccg ccgaggactc gcgggggcgt      1140
cagggcgggg acgcgccac tgaggacgac tactgggggg gctacggcgg cgaggaccag      1200
cgaggcgagc agacgtgtcc cggggccgcg tgccaggcgc ccgcggactc gcgtggcccc      1260
gtgctctcgg ccgggctgcg caccctctct ctctgcctct tgcctcctggc tccccatcac      1320
ctctga

```

<210> 21

<211> 452

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

Met	Lys	Arg	Ala	Ser	Ser	Gly	Gly	Ser	Arg	Leu	Leu	Ala	Trp	Val	Leu
1				5				10						15	
Trp	Leu	Gln	Ala	Trp	Arg	Val	Ala	Thr	Pro	Cys	Pro	Gly	Ala	Cys	Val
			20					25					30		
Cys	Tyr	Asn	Glu	Pro	Lys	Val	Thr	Thr	Ser	Cys	Pro	Gln	Gln	Gly	Leu
		35					40					45			
Gln	Ala	Val	Pro	Thr	Gly	Ile	Pro	Ala	Ser	Ser	Gln	Arg	Ile	Phe	Leu
	50					55					60				
His	Gly	Asn	Arg	Ile	Ser	Tyr	Val	Pro	Ala	Ala	Ser	Phe	Gln	Ser	Cys
65					70					75					80
Arg	Asn	Leu	Thr	Ile	Leu	Trp	Leu	His	Ser	Asn	Ala	Leu	Ala	Gly	Ile
				85				90					95		
Asp	Ala	Ala	Ala	Phe	Thr	Gly	Leu	Thr	Leu	Leu	Glu	Gln	Leu	Asp	Leu
			100					105					110		
Ser	Asp	Asn	Ala	Gln	Leu	Arg	Val	Val	Asp	Pro	Thr	Thr	Phe	Arg	Gly
		115					120					125			
Leu	Gly	His	Leu	His	Thr	Leu	His	Leu	Asp	Arg	Cys	Gly	Leu	Gln	Glu
	130					135					140				
Leu	Gly	Pro	Gly	Leu	Phe	Arg	Gly	Leu	Ala	Ala	Leu	Gln	Tyr	Leu	Tyr
145					150					155					160
Leu	Gln	Asp	Asn	Asn	Leu	Gln	Ala	Leu	Pro	Asp	Asn	Thr	Phe	Arg	Asp
			165					170						175	
Leu	Gly	Asn	Leu	Thr	His	Leu	Phe	Leu	His	Gly	Asn	Arg	Ile	Pro	Ser
		180					185						190		
Val	Pro	Glu	His	Ala	Phe	Arg	Gly	Leu	His	Ser	Leu	Asp	Arg	Leu	Leu
	195						200					205			
Leu	His	Gln	Asn	His	Val	Ala	Arg	Val	His	Pro	His	Ala	Phe	Arg	Asp
	210					215					220				
Leu	Gly	Arg	Leu	Met	Thr	Leu	Tyr	Leu	Phe	Ala	Asn	Asn	Leu	Ser	Met
225					230					235					240
Leu	Pro	Ala	Glu	Val	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gln	Tyr	Leu	Arg
			245					250						255	
Leu	Asn	Asp	Asn	Pro	Trp	Val	Cys	Asp	Cys	Arg	Ala	Arg	Pro	Leu	Trp
		260						265					270		
Ala	Trp	Leu	Gln	Lys	Phe	Arg	Gly	Ser	Ser	Glu	Val	Pro	Cys	Asn	
		275					280				285				
Leu	Pro	Gln	Arg	Leu	Ala	Gly	Arg	Asp	Leu	Lys	Arg	Leu	Ala	Ala	Ser
	290					295					300				
Asp	Leu	Glu	Gly	Cys	Ala	Val	Ala	Thr	Ser	Pro	Thr	Arg	Pro	Gly	Ser
305					310					315					320
Arg	Ala	Arg	Gly	Asn	Thr	Ser	Pro	Gly	Arg	Pro	Ala	Ser	Ala	Gly	Asn
			325					330						335	
Ala	Leu														

Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu
 420 425 430
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val
 435 440 445
 Leu Gly Pro Cys
 450

<210> 22

<211> 1359

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 22

atgaagaggg	cgctcctccg	aggaagccgg	ctgctggcat	gggtgttatg	gctacaggcc	60
tggagggtag	caacgccctg	ccctggtgcc	tgtgtgtgct	acaatgagcc	caaggtcaca	120
acaagctgcc	cccagcaggg	cctgcaggct	gtaccactg	gcatcccagc	ctccagccag	180
agaatcttcc	tgcacggcaa	ccgaatctct	tacgtgccag	ccgccagctt	ccagtcatgc	240
cggaaatctca	ccatcctgtg	gctgcactca	aatgcgctgg	ccgggattga	tgccgcggcc	300
ttcactggtc	tgaccctcct	ggagcaacta	gatcttagtg	acaatgcaca	gctccgtgtc	360
gtggacccca	ccacgttccg	tggcctgggc	cacctgcaca	cgctgcacct	agaccgatgc	420
ggcctgcagg	agctggggcc	tggcctatct	cgtgggctgg	cagctctgca	gtacctctac	480
ctacaagaca	acaacctgca	ggcacttccc	gacaacacct	tccgagacct	gggcaacctc	540
acgcatctct	ttctgcatgg	caaccgtatc	cccagtgttc	ctgagcacgc	tttccgtggc	600
ttgcacagtc	ttgaccgtct	cctcttgac	cagaaccatg	tggctcgtgt	gcacccacat	660
gccttccggg	accttggccg	actcatgacc	ctctacctgt	ttgccaacaa	cctctccatg	720
ctccccgcag	aggtcctagt	gcccctgagg	tctctgcagt	acctgcgact	caatgacaac	780
ccctgggtgt	gtgactgcag	ggcacgtccg	ctctgggcct	ggctgcagaa	gttccgaggt	840
tcctcatccg	aggtgccctg	caacctaccc	caacgcctgg	caggccgtga	tctgaagcgc	900
ctggctgcca	gtgacttaga	gggttgtgct	gtggctacta	gaccacgcgc	gccgggcagc	960
cgcgcccgcg	gcaacactag	tcccgggagg	ccggcgtctg	ctggaaatgc	actcaagggg	1020
cgtgtgcctc	ccggtgacac	tccaccaggc	aatggctcag	gcccacggca	catcaatgac	1080
tctccatttg	ggactttgcc	gggctctgca	gagccccac	tgactgccct	gcggcctggg	1140
ggttccgagc	ccccgggact	gcccaccacg	ggtccccgca	ggaggccagg	ttgttccaga	1200
aagaaccgca	cccgtagcca	ctgccgtctg	ggccaggcag	gaagtgggag	cagtgggaact	1260
ggggatgcag	aaggttcggg	ggccctgcct	gcctggcct	gcagccttgc	tcctctgggc	1320
cttgactgg	tactttggac	cgtgctcggg	ccctgctga			1359

<210> 23

<211> 452

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 23

Met	Leu	Pro	Gly	Leu	Arg	Arg	Leu	Leu	Gln	Gly	Pro	Ala	Ser	Ala	Cys
1				5				10						15	
Leu	Leu	Leu	Thr	Leu	Leu	Ala	Leu	Pro	Pro	Val	Thr	Pro	Ser	Cys	Pro
			20					25					30		
Met	Leu	Cys	Thr	Cys	Tyr	Ser	Ser	Pro	Pro	Thr	Val	Ser	Cys	Gln	Ala
		35					40					45			
Asn	Asn	Phe	Ser	Ser	Val	Pro	Leu	Ser	Leu	Pro	Pro	Ser	Thr	Gln	Arg
	50					55				60					
Leu	Phe	Leu	Gln	Asn	Asn	Leu	Ile	Arg	Ser	Leu	Arg	Pro	Gly	Thr	Phe
65					70				75					80	

Gly Pro Asn Leu Leu Thr Leu Trp Leu Phe Ser Asn Asn Leu Ser Thr
 85 90 95
 Ile Tyr Pro Gly Thr Phe Arg His Leu Gln Ala Leu Glu Glu Leu Asp
 100 105 110
 Leu Gly Asp Asn Arg His Leu Arg Ser Leu Glu Pro Asp Thr Phe Gln
 115 120 125
 Gly Leu Glu Arg Leu Gln Ser Leu His Leu Tyr Arg Cys Gln Leu Ser
 130 135 140
 Ser Leu Pro Gly Asn Ile Phe Arg Gly Leu Val Ser Leu Gln Tyr Leu
 145 150 155 160
 Tyr Leu Gln Glu Asn Ser Leu Leu His Leu Gln Asp Asp Leu Phe Ala
 165 170 175
 Asp Leu Ala Asn Leu Ser His Leu Phe Leu His Gly Asn Arg Leu Arg
 180 185 190
 Leu Leu Thr Glu His Val Phe Arg Gly Leu Gly Ser Leu Asp Arg Leu
 195 200 205
 Leu Leu His Gly Asn Arg Leu Gln Gly Val His Arg Ala Ala Phe His
 210 215 220
 Gly Leu Ser Arg Leu Thr Ile Leu Tyr Leu Phe Asn Asn Ser Leu Ala
 225 230 235 240
 Ser Leu Pro Gly Glu Ala Leu Ala Asp Leu Pro Ala Leu Glu Phe Leu
 245 250 255
 Arg Leu Asn Ala Asn Pro Trp Ala Cys Asp Cys Arg Ala Arg Pro Leu
 260 265 270
 Trp Ala Trp Phe Gln Arg Ala Arg Val Ser Ser Ser Asp Val Thr Cys
 275 280 285
 Ala Thr Pro Pro Glu Arg Gln Gly Arg Asp Leu Arg Thr Leu Arg Asp
 290 295 300
 Thr Asp Phe Gln Ala Cys Pro Pro Pro Thr Pro Thr Arg Pro Gly Ser
 305 310 315 320
 Arg Ala Arg Gly Glu Thr Ser Pro Gly Arg Pro Ala Ser Ala Gly Asn
 325 330 335
 Ala Leu Lys Gly Arg Val Pro Pro Gly Asp Thr Pro Pro Gly Asn Gly
 340 345 350
 Ser Gly Pro Arg His Ile Asn Asp Ser Pro Phe Gly Thr Leu Pro Gly
 355 360 365
 Ser Ala Glu Pro Pro Leu Thr Ala Leu Arg Pro Gly Gly Ser Glu Pro
 370 375 380
 Pro Gly Leu Pro Thr Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg
 385 390 395 400
 Lys Asn Arg Thr Arg Ser His Cys Arg Leu Gly Gln Ala Gly Ser Gly
 405 410 415
 Ser Ser Gly Thr Gly Asp Ala Glu Gly Ser Gly Ala Leu Pro Ala Leu
 420 425 430
 Ala Cys Ser Leu Ala Pro Leu Gly Leu Ala Leu Val Leu Trp Thr Val
 435 440 445
 Leu Gly Pro Cys
 450

<210> 24

<211> 1358

<212> DNA

<213> Artificial Sequence

<220>

 <223> Description of Artificial Sequence:/Note =
 Synthetic Construct

<400> 24

 atgctgcccc ggctccggcg cctgctgcaa ggtcctgcct cagcctgcct cctgctgaca
 ctccctggccc tccctcctgt gacccccagc tgccctatgc tctgcacctg ctactcctct

 60
 120

```

ccgcccacag tgagctgcca ggccaacaac ttctcctcgg tgccgctgtc cttgccaccc 180
agtacacagc gactcttctt gcagaacaac ctcatctcgt cactgcggcc aggaactttt 240
gggcccacac tgctcaccct gtggctcctt tccaacaacc tctccaocat ctaccctggc 300
accttccgac atctgcaggg cctagaggaa ctggacctcg gtgacaatcg gcacctgcgc 360
tccctggagc ctgacacctt ccagggcctg gagaggctgc agtcactaca tctgtaccgg 420
tgccagctca gcagtctgcc tggcaacatc ttccgaggcc tggtcagcct acagtacctc 480
tacctccagg agaacagcct gctccaccta caggatgact tgttcgccga cctggccaac 540
ctgagccacc ttttctcca cgggaaccgc ctgcggctgc tcacggagca cgtgttcgcg 600
ggcttgggca gcctggaccg gctgctgctg cagggaacc ggctgcaggg cgtacaccgc 660
gcagccttcc acggtctcag ccgcctcacc atcctttacc tgttcaacaa cagcctggcc 720
tcgctgccgg gagaggcgct ggctgacctg ccagcgctcg agttcctgcg gctcaacgcc 780
aaccctggg cgtgcgactg ccgcgctcgg ccgctctggg cttggttcca gcgcgcgcgg 840
gtgtccagct ccgacgtgac ctgcgccacc ccgccgagc gccagggccg ggacctgcgc 900
acgctgcgcg acaccgattt ccaagcgtgc ccgcgcacca caccacgcgc gccgggcagc 960
cgcgcgcgcg ggaaactagt cccgggaggg cggcgctctg tggaaatgca ctcaaggggac 1020
gtgtgcctcc cgggtgacact ccaccaggca atggctcagg ccacaggcac atcaatgact 1080
ctccatttgg gacttttgcc ggctctgcag agccccact gactgccctg cggcctgggg 1140
gttccgagcc cccgggactg cccaccacgg gtccccgcag gaggccaggt tgttccagaa 1200
agaaccgcac ccgtagccac tgccgtctgg gccaggcagg aagtgggagc agtggaaactg 1260
gggatgcaga aggttcgggg gccctgcctg cctggcctg cagccttgct cctctggggc 1320
ttgcactggt actttggacc gtgctcgggc cctgctga 1358

```

<210> 25

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 25

```

Thr Gly Pro Arg Arg Arg Pro Gly Cys Ser Arg Lys Asn Arg Thr Arg
  1             5             10             15
Leu

```

<210> 26

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 26

```

Thr Ala Arg Pro Lys Arg Lys Gly Lys Cys Ala Arg Arg Thr
  1             5             10

```

<210> 27

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 27

His Ser Gly Ala Gly
1 5

<210> 28

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 28

gccatcccgg agggcatccc

20

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:/Note =
Synthetic Construct

<400> 29

acacttatag aggtagaggg cgtg

24